

## **ENVIRONMENTAL AND CULTURAL RESOURCES OVERVIEW**

The objective of the environmental and cultural resources review was to assist transportation planning endeavors through the identification of sensitive social and natural environmental features and cultural resources located in the Rex Whitton study area. For these background reviews, the study area was divided into three zones--primary, secondary, and tertiary. The corridor width varied throughout the length of the study area, extending north and south of the existing Rex Whitton alignment from approximately three-quarters of a mile to roughly two miles. Aerial mosaic photo plates found in Appendix G present the study area, its zones, and the location of environmental features and cultural resources within the study area.

**National Environmental Policy Act (NEPA)...**Following this study, the next stage in the development of improvements is complying with the National Environmental Policy Act (NEPA). NEPA established a national environmental policy intentionally focused on Federal activities and the desire for a sustainable environment balanced with other essential needs of present and future generations.

NEPA established a supplemental mandate for Federal agencies to consider the potential environmental consequences of their proposals, document the analysis, and make this information available to the public for comment prior to implementation.

NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals. NEPA also requires Federal agencies to use an interdisciplinary approach in planning and decision making for any action that adversely impacts the environment.

NEPA requires the examination and avoidance of potential impacts to the social and natural environment when considering approval of proposed transportation projects. In addition to evaluating the potential environmental effects, we must also take into account the transportation needs of the public in reaching a decision that is in the best overall public interest. The NEPA project development process is an approach to balanced transportation decision-making that takes into account the potential impacts on the human and natural environment and the public's need for safe and efficient transportation.

**Social and Economic Considerations...**The Rex Whitton Expressway study area continues to develop and redevelop with residential and commercial possibilities. The downtown roadway section as indicated previously was designed and built as an urban arterial; as such

this section will have the greatest potential for social and economic impacts given the proximity of neighborhoods and businesses. With the previous construction of the expressway this area has already experienced neighborhood impacts (splits), and the related loss of cohesion and safety often associated with intact neighborhoods. Therefore, careful consideration to business and residential displacements and access to properties will be important.

Further, any interchange concept chosen for the Central East Side, along with other improvements, will likely have impacts to neighborhoods outside the immediate impact area adjacent to the expressway. It is important to note that portions of this part of the downtown study area are characterized demographically as minority and low-income.

As a result, continued public input from all affected communities and context-sensitive solutions will be important for the subsequent NEPA study and design of the improvements. Achieving informed consent or agreement on improvements will require a compromise of all interested groups.

**Threatened and Endangered Species...**A review of the Heritage Database Information from the Missouri Department of Conservation (MDC) did not reveal any threatened, endangered, or otherwise sensitive species or their habitats within the immediate area of the existing roadway. There are numerous rare species that occur in and around the Missouri and Moreau Rivers. As long as the improvements will not occur in close proximity to either of these two rivers there should not be any threatened or endangered species issues at this time.

**Farmland...**This study takes place within city limits. Therefore, it meets the Farmland Protection Policy Act (FPPA) definition of "land committed to other uses," and farmland impact will not be further evaluated.

**Floodplain...**Executive Order 11988, Floodplain Management, and subsequent federal floodplain management guidelines mandate an evaluation of floodplain impacts. When available, flood hazard boundary maps (National Flood Insurance Program) and flood insurance studies for the study area are used to determine the limits of the base (100-year) floodplain and the extent of encroachment.

The Federal Emergency Management Agency (FEMA) and Federal Highway Administration (FHWA) guidelines 23 CFR 650 have identified the base (100-year) flood as the flood having a one-percent probability of being equaled or exceeded in any given year. The base floodplain is the area of 100-year flood hazard within a county or community. The regulatory floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood discharge can be conveyed without increasing the base flood elevation more than a specified amount. FEMA has mandated that improvements can cause no rise in the regulatory floodway, and a one-foot cumulative rise for all improvements in the base (100-year) floodplain. For improvements that involve the state of Missouri, the State Emergency Management Agency (SEMA) issues floodplain development permits. In the case of improvements proposed within regulatory floodways, a "no-rise" certificate, if applicable, should be obtained prior to issuance of a permit.

Depending upon the improvements, a “no-rise” certificate will likely be necessary, as well as a Floodplain Development Permit from SEMA. There is extensive base (100-year) floodplain and regulatory floodway from Wears Creek and its tributaries along Missouri Boulevard, Rex Whitton Expressway, and Route 54.

**Federal Emergency Management Agency (FEMA) Buyout Lands...** The Flood Disaster Protection Act of 1973, as amended by the Disaster Relief and Emergency Assistance Act of 1988 (The Stafford Act), identified the use of disaster relief funds under Section 404 for the Hazard Mitigation Grand Program (HMGP), including the acquisition and relocation of flood damaged property. The Volkmer Bill further expanded the use of HMGP funds under Section 404 to “buyout” flood damaged property, which had been affected by the Great Flood of 1993.

There are numerous restrictions on these FEMA buyout properties. No structures or improvements may be erected on these properties unless they are open on all sides. The site shall be used only for open space purposes, and shall stay in public ownership. These conditions and restrictions (among others), along with the right to enforce same, are deemed to be covenants running with the land in perpetuity and are binding on subsequent successors, grantees, or assigns. Any decision involving these properties should take into consideration that 2-3 years are necessary to process a request for a exemption from FEMA to utilize buyout properties for transportation improvements deemed to be in the public interest. This exemption would likely allow a permanent easement rather than a transfer of property.

There are four FEMA buyout properties in the area: 703 Mulberry Street, Cedar Street, 718 Cedarvale Street and 1333 Monroe Street.

**Parklands/Section 4(f) and 6(f)...** Section 4(f) is part of the Department of Transportation (DOT) Act of 1966 that was designed to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. To be Section 4(f) eligible the property must be publicly owned, except for historic sites, which could be either public or privately owned. Section 4(f) eligible sites cannot be impacted by federally funded actions unless there is no feasible and prudent alternative.

Section 6(f) is part of the Land and Water Conservation Fund (LWCF) Act, which was designed to provide restrictions for public recreation facilities funded with LWCF money. The LWCF Act provides funds for the acquisition and development of public outdoor recreation facilities that could include community, county, and state parks, trails, fairgrounds, conservation areas, boat ramps, shooting ranges, etc. Facilities that are LWCF-assisted must be maintained for outdoor recreation in perpetuity and therefore require mitigation that includes replacement land of at least equal value and recreation utility.

There are three Department of Transportation (DOT) Section 4(f) park properties in the study area. All are located north of the expressway: The Runge Conservation Center and associated Missouri Department of Conservation (MDC) Headquarters at Route 179 in the

northwest portion of the study area, East Miller Park at 900 East Miller Street, and Park Place, a mini-park near Capitol Avenue and a water tank, in the northeast portion of the study area. There are two Section 6(f) properties: both are south of the expressway and belong to Lincoln University. They are the Lincoln University Recreational Park and the Lincoln University Tennis Courts.

**Noise...** Depending upon the extent of improvements recommended for the Rex Whitton Expressway, a noise study will most likely be required in the NEPA phase of development. If lanes are not added (capacity) or insignificant reconstruction is done then a noise assessment will not be necessary.

**Air Quality...** In accordance with the agreement executed in March 1988 between the parties of the Federal Highway Administration, Missouri Department of Natural Resources and the Missouri Department of Transportation, a detailed air quality analysis for inclusion in an environmental document will only be prepared on federally funded highway projects when the present or predicted average daily traffic volume on the project exceeds 54,000 vehicles in the year of project construction or 72,700 vehicles in the twentieth (20th) year following the project construction. Neither the construction nor the design year projected volumes exceed these average daily traffic volumes.

**Wetlands...** Review of the study area within approximately 600 feet from the existing route centerline identified five perennial streams and two ponds that could potentially be impacted. Perennial streams are under the jurisdiction of the U.S. Army Corps of Engineers (COE) and if impacted, mitigation will be required. The ponds may be under the COE's jurisdiction depending upon vegetation development within the pond. All five streams are urban streams and most lack any significant corridor. It is possible that other jurisdictional streams exist within the study area; however, further study and field checks of the corridor would be necessary to make this determination.

The two ponds are located one on each side of the expressway, one north and one south. The pond located north is in the northwest quadrant of the Dix Road interchange. The pond located south is north of St. Mary's Boulevard (see map).

Two jurisdictional (blue-lines on topography map) tributaries to the Missouri River are located in the SE ¼ of section 17, T44N, R11W. These two streams currently pass through pipes under the expressway. The third jurisdictional stream is located approximately where Broadway crosses the expressway to Lafayette Street. This stream parallels the expressway for approximately 2000 feet. It passes into a pipe under the expressway, around Simonsen School, and is eventually piped back under the expressway. The expressway near Missouri Boulevard crosses Wears Creek, the fourth jurisdictional stream. The final jurisdictional stream runs parallel from Route 54 to Route 179 for over 8,000 linear feet. There could be significant potential for large impacts to this stream because of its close proximity.

**Hazardous Waste...** A records review was conducted for the study area. The following sources were searched for potential hazardous and solid waste concerns: Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS); National Response Center Hotline database; Missouri Department of Natural

Resources (DNR) Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites in Missouri, Fiscal Year 2005; DNR Missouri Hazardous Waste Treatment, Storage, and Disposal Facilities List; DNR Solid Waste Facilities List; DNR Underground Storage Tank (UST) database; Center for Agricultural, Resource and Environmental Systems; and Missouri Petroleum Storage Tank Insurance Fund database.

Numerous sites of concern are located within the study area. There also could be other sites discovered in the area that are not registered with DNR. Various reasons account for these sites, such as sites closed prior to regulation, sites that have failed to properly register with DNR or sites that generate exempt quantities of hazardous waste. Note also that DNR uses zip code centroid data for sites that do not have good Geographic Positioning System data. This causes all of these sites to show up in the center of the zip code, but they might actually be located quite a distance from this locale.

**Active UST Facilities:** These are sites with Underground Storage Tanks registered with the Missouri Department of Natural Resources that are currently in use.

**Active Remediation Facilities:** These are Underground and Aboveground Storage Tank sites registered with the DNR that have known releases. Many of these sites will also be Active UST Facilities.

**Hazardous Waste Generators:** These are sites registered with the DNR as active generators of hazardous waste. Some aspect of their operation results in regulated hazardous waste that must be disposed. Some of these might also duplicate the previous two data sets.

Further study and field reconnaissance will be necessary to determine the actual impacts by proposed improvements.

**Cultural Resources Review...**The MoDOT Historic Preservation staff performed a cultural resources literature review to identify known or previously recorded historic properties located within the Rex Whitton study area. A historic property, by federal definition, is any prehistoric or historic site, building, structure, district, or object included in, or eligible for inclusion in the National Register of Historic Places (NRHP). Historic properties are protected by federal regulations and laws and therefore must be considered for projects that are federally funded or require federal licenses or permits.

For the literature search, MoDOT staff consulted records at the Missouri State Historic Preservation Office (SHPO), Department of Natural Resources, the City of Jefferson Community Development, Cole County Assessor's Office, and various internet web sites. The background search at the SHPO's cultural resources inventory was conducted to determine the extent of previous cultural resources surveys and evaluations for properties in the vicinity of the Rex Whitton study area. This review included a search of the known archaeological sites and NRHP properties within the study limits. Results of the literature search, the "Cultural Resources Summary," are presented in Appendix G, beginning with architectural resources followed by bridge and archaeology discussions. The photo plates in Appendix G identify the location of cultural resources referenced in the summary. The

cultural resources are numbered on the maps and cross-referenced in tables found in the summary (Appendix G).

One historical building, Lincoln University President's House (L50), is located in the primary study area. Three historic properties are adjacent to the primary area and two of these are both NRHP properties as well as City of Jefferson Local Landmarks: the Jefferson City National Cemetery (N16, L10), the Cherry Street Grocery (N09, L28), and Tergin Apartments (N31). The cemetery abuts the primary study area; therefore, the northern border of the primary area will need to be carefully considered at this locale as transportation improvements are proposed. There are a few other historic properties in the secondary zone both north and south of the Expressway, but the majority of historic properties are found in the northern tertiary area.

There are about 40 bridge resources within the study area. Most of these are located along Routes 50 and 54/63, and are less than 50 years old. None of the structures have been listed on the NRHP, and none have been determined NRHP eligible; however, four of these bridges have the potential for fulfilling NRHP eligibility. All four of these bridges are located in the tertiary area of the study limits.

Other than limited excavations in the vicinity of the Lohman Landing near the Missouri State Capitol, relatively few archaeological investigations have been conducted within the limits of the Rex Whitton study area and none were noted within the primary study area. The probability of significant archaeological sites in the primary area is low.

While improvements to the existing alignment may be confined to the primary area, the overall effects may not. Facility improvements that involve reconfigured or new interchanges may in turn require improvements to city streets that serve as north and south arteries to the Expressway, thus secondary and cumulative impacts may affect historic places located in the secondary and tertiary regions. If future studies determine that the project has an area of potential effects that extends beyond the primary study area, it is possible that one or more of the previously recorded historic properties noted in Appendix G will require additional assessment. Once the transportation needs for the Rex Whitton Expressway are further assessed and concepts are proposed, additional cultural resources investigations will be performed to identify any historic properties that the project could impact.

**INITIAL PUBLIC INVOLVEMENT ....** To encourage public input into the identification of existing and potential deficiencies along the corridor and within the transportation systems of the area, both open-house and targeted stakeholder meetings were held. The open-house public meeting was held on Wednesday, June 8, in Kertz Hall at Immaculate Conception School located at 1206 E. McCarty in Jefferson City from 4-7 P.M. Two separate stakeholder meetings were held in the same location the afternoon before and the morning after the public meeting. The stakeholder lists for these special meetings were developed by the City of Jefferson, Cole County and MoDOT personnel and were specifically targeted at business owners in the corridor, community leaders, and persons with special knowledge of the area that would be anticipated to have valuable input into the identification of transportation deficiencies.

These meetings were opportunities for MoDOT and the study team to gather input about current and future transportation needs of the Rex Whitton Expressway from east of the Route 179 interchange to west of Eastland Drive in Jefferson City. A brief presentation was made during the meetings detailing the purpose of the study and that MoDOT, the City of Jefferson, and Cole County are working together to study the Expressway to determine current needs and how future growth might impact safety and traffic flow through the area. It was noted to all parties that attended these meetings that this study is a preliminary step in a multi-tiered process to look at short and long-term alternatives to address traffic flow along this highway.

In general, the overall statements of the attending parties were supportive of enhancements to the Expressway that would reduce congestion and enhance access to the section of the City between Jackson Street and Clark Avenue (i.e. the Central East Side). The majority of the attendees noted that congested conditions were common along the Expressway during peak travel times, especially within the downtown area.

In addition, many of the attendees expressed concerns regarding the anticipated traffic demands of the new Missouri State Penitentiary (MSP) Development project that is under way. Persons in the Central East Side of the City expressed a need for improved access for their neighborhood and for the MSP Development. They have concerns that due to the size and magnitude of the MSP Development, traffic flows to and from to this new development may overwhelm the existing street network and further deteriorate the traffic flows through their neighborhood. The need for a second access point to the Expressway in the Lafayette Street area was strongly stated by many of the public and stakeholder participants of the meetings.

Copies of the public notices, stakeholder lists and letters, and handout information from the meeting are contained in **Appendix H – Initial Public Involvement**. In addition, a copy of the PowerPoint presentation delivered at each of the meetings is also in the appendix.